

Childhood contact with social services, self-harm and suicidal or self-harm ideation in young adulthood: A population-wide record-linkage study

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This Data Insight uses population-wide data in Northern Ireland (NI) to quantify the association between childhood contact with social services and presentation to an emergency department (ED) with self-harm or thoughts of suicide or self-harm in young adulthood. The analysis uses data developed as part of a wider project within the Administrative Data Research Centre Northern Ireland (ADRC NI) examining outcomes for children in contact with social services.

Summary

This study provides the first UK, population-level evidence that young adults who had any contact with social services in childhood are significantly more likely to present to an ED with self-harm or thoughts of self-harm or suicide (hereafter 'ideation') than their peers with no history of contact. There is a clear stepwise increase in the likelihood of presenting with self-harm or ideation in adulthood as the level of interaction with social services in childhood increases.

Most of the young adults in this study that had contact with social services in childhood did **not** present to an ED with self-harm or ideation, and poor outcomes are not inevitable. However, **over 40% of all young adults in NI that presented to an ED with self-harm or ideation during follow-up had a history of contact with social services.** Understanding the magnitude of childhood adversity amongst adults that present to EDs with self-harm or ideation may inform clinicians' understanding and therapeutic decision-making.

Background

The aim of the children's social care system in NI, like the rest of the UK, is not only to keep a child safe from harm, but also to ensure children at risk of poor outcomes are supported to fulfill their potential. Children in contact with social services (i.e. children referred to child protection/family support measures at home or in care) have typically experienced difficult circumstances that leave them at increased risk of mental ill health.

Children in contact with social services experience, on average, poorer outcomes across the life course compared with their peers in the general population.¹⁻² However, there is limited evidence in relation to self-harm and suicidal ideation risk in adulthood.³

To date, the evidence from large-scale, prospective studies is limited, with no such studies in the UK.⁴⁻⁶ This study utilised large, linked administrative datasets to examine the likelihood of self-harm or ideation in young adulthood given childhood contact with social services.

What we did

This unique longitudinal record-linkage study used several population-wide health and social care datasets:

- The National Health Applications and Infrastructure Services dataset, which contains information on all individuals registered with a General Practitioner (GP) in NI, provided the population spine. The cohort included 253,495 individuals born 1985-1993 with full data, alive and resident in NI during follow-up at ages 18-30
- The Social Services Client Administration and Retrieval Environment dataset provided each individual's social care records from birth up to age 18
- The Northern Ireland Registry of Self-Harm provided four years of outcome data (2012-2015) on presentations to all 12 EDs in NI following an act of self-harm or ideation.

These linked datasets were used to estimate the association between the level of contact with social services in childhood and ED presentations of self-harm and ideation in young adulthood. Contact was examined in four mutually exclusive groups: 1) no contact, 2) referred but assessed as not in need of help or protection, in every interaction with social services, 3) assessed as a child in need (i.e. subject to a child in need plan, or child protection measures in their own home), and 4) child in care (i.e. foster, kinship, residential care, or placed with parent(s)).

What we found

Overall, 4,026 of the 253,495 cohort members (1.6%) presented to an ED with self-harm and 1,669 (0.7%) with ideation during follow-up (Table 1). The largest absolute number of presenters were never in contact with social services (n=2,889), followed by those who were a child in need (n=1,178), a child in care (n=475), and lastly those assessed as not in need (n=346).

However, proportionately, 13.5% of care experienced young adults presented with self-harm or ideation compared to just 1.3% of those with no social care contact. While individuals with childhood social care contact comprised 10.8% of the cohort, they accounted for 40.9% of all young adults who presented with self-harm or ideation (Table 1).

The likelihood of self-harm or ideation increased stepwise with level of childhood contact with social services (Table 1). After full adjustment, the highest risk was found in care experienced young adults, who were 10 times more likely to present to an ED with self-harm and 13 times more likely to present with ideation than their peers with no childhood contact. However, even young adults who were referred to social services, but deemed "not in need" in childhood, maintained a higher likelihood of self-harm or ideation than peers never in contact with social services.

Why it matters

Mental ill health is a major public health concern, and although self-harm and ideation themselves are behaviours that require appropriate support, they are also the largest known predictors of death by suicide. Understanding who is most at risk and who may benefit most from targeted interventions is vital to improving mental health outcomes, reducing rates of death by suicide, and understanding prevention pathways.

Most children in contact with social services do not present to an ED with self-harm or ideation in young adulthood. However, the large and disproportionate burden of self-harm and ideation within this group underscores the need for a policy response. The evidence presents a prime opportunity to develop appropriate interventions targeted at young adults with a childhood history of contact with social services, or children still in contact with social services or approaching leaving care.

Table 1 - Likelihood of self-harm or ideation in young adults born 1985-1993 in Northern Ireland by level of childhood contact with social services (n=253 495)

Self-harm (n=4,026)				
	Number presented to ED (%)		Unadjusted OR	Adjusted OR ^a
Social care history				
No contact	2,343	(1.0%)	1.00	1.00
Not in need	288	(3.9%)	3.94 (3.47-4.46)	3.50 (3.09-3.98)
Child in need	1,002	(6.1%)	6.33 (5.87-6.83)	5.49 (5.08-5.94)
Child in care	393	(11.2%)	11.99 (10.71-13.42)	10.33 (9.22-11.58)
Ideation (n=1,669)				
	Number presented to ED (%)		Unadjusted OR	Adjusted OR ^a
Social care history				
No contact	934	(0.4%)	1.00	1.00
Not in need	119	(1.6%)	4.21 (3.47-5.11)	3.65 (3.00-4.44)
Child in need	407	(2.5%)	6.21 (5.52-6.99)	5.58 (4.94-6.31)
Child in care	209	(5.9%)	15.29 (13.11-17.85)	13.17 (11.26-15.41)
Any self-harm or ideation (n=4,888)				
	Number presented to ED (%)		Unadjusted OR	Adjusted OR ^a
Social care history				
No contact	2,889	(1.3%)	1.00	1.00
Not in need	346	(4.7%)	3.90 (3.47-4.37)	3.45 (3.07-3.88)
Child in need	1,178	(7.2%)	6.09 (5.68-6.53)	5.33 (4.97-5.74)
Child in care	475	(13.5%)	12.07 (10.88-13.39)	10.49 (9.45-11.66)

Data is number (%) of individuals presenting to an ED within each social care category and odds ratios (ORs) with 95% confidence intervals from multilevel logistic regression models adjusted for clustering by Health and Social Care Trust.

Of n=4,888 individuals that presented with any self-harm or ideation, n=1,999 had contact with social services in childhood $((346+1,178+475)/4,888*100=40.9\%)$.

^aAdjusted for sex, age (years), area-level income deprivation and area of residence

What next?

The next phase of research will utilise extended social care and self-harm/ideation data to examine in more detail critical risk periods, as well as demographic and social care exposure factors which predict positive trajectories for children in contact with social services. This research is currently being developed with a group of young experts by experience who are part of the Data Research Advisory Group working in partnership with ADRC NI.

Related publications

A [Young person's Data Insight](#) and [journal article](#) are also available for this study.

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